

## Time Scales

### Consider the following scenario:

- in your club, you're limited to 1 hour of flight when others are waiting
- you wait your turn
- you launch and release into the "house thermal"
- you climb to the top of the lift, then grind away for a while
- eventually, you get bored and decide to find another thermal
- you immediately lose a chunk of that hard-won altitude
- you persist in your quest anyway—for maybe 30 seconds!
- you scurry back to the safety of the house thermal

Has this ever happened to you? If so--

### This is negative training!

Successful cross-country flight depends on straight flight between thermals. This is so blindingly obvious that it is often overlooked—and most clubs' rules only make the situation worse. (In all fairness, often clubs really have no choice.)

To progress as a soaring pilot, it is necessary to re-think your sense of time scales and to be willing to spend significant time gliding between thermals. The skills involved in re-centering a known thermal are much less crucial than being able to readily locate new thermals time after time.

Consider an actual flight from Air Sailing to the Black Rock Desert, flown on June 25, 2001. The total distance flown was 52 nm; total duration was 2:00.

- the weather was extremely weak—drizzle fell at dawn, the day was completely overcast and cloud bases never allowed altitudes above 11,500' msl at best.
- the first 30 minutes were spent on the Red Rocks, just trying to remain airborne
- average climb rate was 330 ft/min; average time in each thermal was 6 min
- once the decision to leave the field had been made, just 5 thermals were used—  
or **one thermal every 18 minutes!**

On a stronger day, the thermal tops (and the climb rates) would have been higher, leading to longer interthermal glides. However, these interthermal glides would have been flown at higher airspeeds—so the time between thermals would not have been significantly longer. These times are typical for 15 meters or less. Bottom line: even on weak days, expect to

### Spend minutes, not seconds, between thermal climbs!